

ABSTRACT OF THE DISCLOSURE

A half-symbol constellation display for readily providing better observability of signal distortions in a modulated signal representing symbols of information uses a sample clock derived from a symbol clock for the modulated signal, the sample clock having the same period as the symbol clock but being shifted one-half period in phase with respect to the symbol clock. Quadrature component signals of the modulated signal are sampled using the sample clock to produce sample pairs, referred to as pseudo-symbols, that are symmetric about a symbol sample point. The pseudo-symbols form a plurality of clusters when displayed on a quadrature coordinate plane, with the diameter of each cluster being determined by the outer pseudo-symbols for the corresponding symbols. The circumferences of such clusters for an ideal modulated signal may be displayed as a template to make it easier to recognize the shift of the pseudo-symbols from the ideal locations due to distortions in the modulated signal.